



Large-Scale Renewable Energy Development on Public Lands

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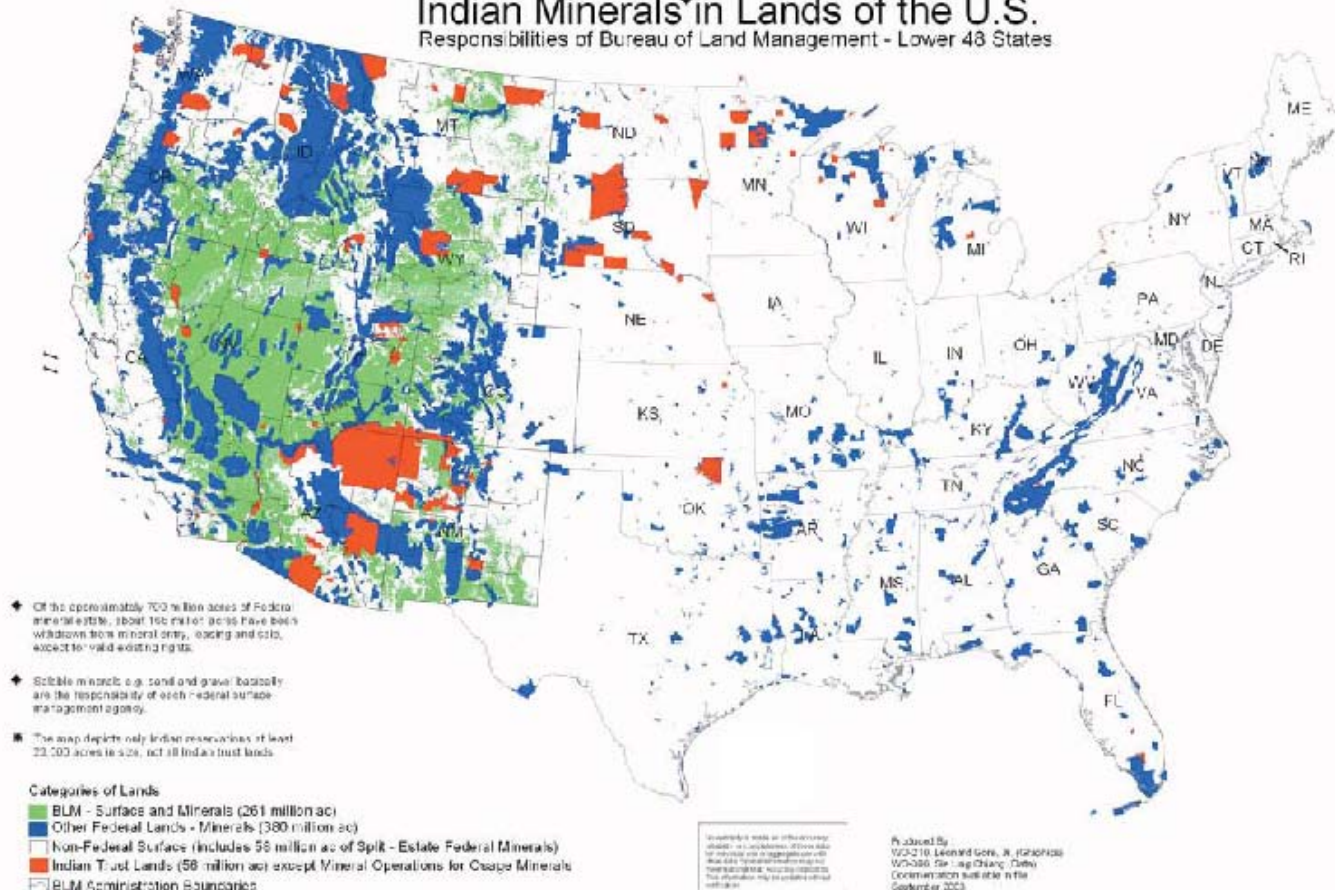
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FEMP
Federal Energy Management Program

- BLM RE Drivers
- BLM RE Programs
- BLM Permitting and Revenues
- Case Studies
- Withdrawn Military Land

BLM:	Bureau of Land Management
BO:	Biological Opinion
CSP:	Concentrating Solar Power
DOE:	Department of Energy
DOI:	Department of Interior
EA:	Environmental Assessment
EIS:	Environmental Impact Statement
FONSI:	Finding of No Significant Impact
FS:	U.S. Forest Service
IM:	Instruction Memorandum
MPDS:	Maximum Potential Development Scenario
NEPA:	National Environmental Policy Act
NOI:	Notice of Intent
NOP:	Notice to Proceed
PEIS:	Programmatic Environmental Impact Statement
POD:	Plan of Development
PPA:	Power Purchase Agreement
PUC:	Public Utility Commission
PV:	Photovoltaic
RFDS:	Reasonably Foreseeable Development Scenario
RFP:	Request for Proposal
ROD:	Record of Decision
ROW:	Right-of-way
RPS:	Renewable Portfolio Standard
SEZ:	Solar Energy Zone
SF:	Standard Form

Public Lands, On-Shore Federal and Indian Minerals* in Lands of the U.S. Responsibilities of Bureau of Land Management - Lower 48 States



- Energy Policy Act of 2005 (Title II, Section 211)
 - 10,000 MWs of non-hydro RE projects permitted on public land by FY2015
- Secretary Order 3285A1 (February 2010)
 - 10,000 MWs of non-hydro RE by FY2012
- President's State of the Union Address
 - 2011: Clean Energy Standard: 80% clean electricity by 2035
 - 2012: Allow development of clean energy on public lands to power 3 million homes.
- State Renewable Portfolio Standards (RPS's)
 - California: 33% by 2020
 - Nevada: 25% by 2025
 - Arizona: 15% by 2025
 - Oregon: 25% by 2025 (large utilities)

- 2010: 12 Fast Track Projects (3,890 MWs)
- 2011: 15 Priority Projects (2,814 MWs)
- 2012: 17 Priority Projects (6,689 MWs)
- Wind Energy Program
 - Wind Energy Programmatic Environmental Impact Statement (PEIS) completed 2005 (<http://windeis.anl.gov/>)
- Geothermal Energy Program
 - Geothermal Energy PEIS completed 2008 (http://www.blm.gov/wo/st/en/prog/energy/geothermal/geothermaI_nationwide.html)
- Solar Energy
 - Solar PEIS (October 2012 expected completion) (<http://solareis.anl.gov/index.cfm>)

- Proposed Project
- Project Alternatives
- Project Purpose and Need
- Biological Resources
- Visual Resources
- Land Use
- Wilderness and Recreation
- Agriculture
- Cultural and Paleontological Resources
- Noise
- Transportation and Traffic
- Public Health and Safety
- Air Quality
- Water Resources
- Geology, Mineral Resources, and Soils
- Public Services and Utilities
- Fire and Fuels Management
- Social and Economic Conditions
- Environmental Justice
- Climate Change
- Cumulative Impacts of all the above

BLM Permitting Process for Solar and Wind Energy

- At least two pre-application meetings with developer (Instruction Memorandum IM 2011-061)
- Developer submits Application for Transportation and Utility Systems and Facilities on Federal Lands (SF 299)
- BLM screens the application for level of potential conflict (IM 2011-061)
 - If the application has a high level of potential conflict, BLM has the discretion to reject the application or give it a low priority
- BLM gives the developer 90-days to submit Plan of Development (POD) (IM 2011-060)
 - POD includes project description; construction plans; related facilities and systems (e.g., transmission, PPA, natural gas backup, communication systems); O&M; environmental, cultural, and tribal considerations; maps and drawings; and supplementary information
 - POD must demonstrate the developer's financial and technical capability to complete project
- BLM issues Notice of Intent to prepare draft EIS in Federal Register
- BLM holds public scoping meetings for draft EIS
- BLM releases draft EIS
- BLM releases final EIS
- Secretary of Interior signs Record of Decision (ROD)
- BLM field office issues Right-of-Way (ROW) Lease/Grant
- BLM field office issues Notice to Proceed (NOP) to start construction

- Geothermal
 - Competitive Lease Sales
 - Includes Bonus Bids
 - Royalties
- Wind
 - First come first serve / Policy
 - Cost Recovery Fees for processing and monitoring
 - No Royalties
 - Annual Rent: \$4,155 per MW
- Solar
 - First come first serve / Policy
 - Cost Recovery Fees for processing and monitoring
 - No Royalties
 - Annual Base Rent: \$15.70 – 313.88 per acre
 - Annual MW Capacity Fee
 - PV: \$5,256 per MW
 - CPV and CSP: \$6,570 per MW
 - CSP with >3 hours of storage: \$7,884 per MW
- Competitive Process
 - Being considered by BLM and Congress



Silver State North Solar Energy Timeline

Project: 50 MW solar PV, near Primm, Nevada

- 06/09: Notice of Intent to prepare Draft Environmental Impact Statement
- 08/09: Scoping Meetings for Draft EIS
- 10/09: NV Energy RFP for >1MW systems to meet Nevada RPS
- 02/10: NV Energy and First Solar announce 25-year PPA
- 04/10: Draft EIS published
- 05/10: Comment period for Draft EIS
- 07/10: Nevada PUC approves PPA
- 09/10: Final EIS published; Fish and Wildlife Service complete Biological Opinion
- 10/10: Secretary of Interior signs Record of Decision; Las Vegas Field Office issues Right-of-Way Lease/Grant
- 03/12: Enbridge buys project
- 05/12: Expected commercial operations date

Crescent Dunes Solar Energy



Project: 110 MW CSP Power Tower, near Tonopah, Nevada

09/08: NV Energy RFP for >1MW systems to meet Nevada RPS

12/08: SolarReserve submits Initial Plan of Development to BLM

11/09: Notice of Intent to prepare Draft EIS

12/09: Scoping Meetings for Draft EIS

02/10: NV Energy and SolarReserve announce 25-year PPA

07/10: Nevada PUC approves PPA

09/10: Draft EIS published

10/10: Comment period for Draft EIS

11/10: Final EIS published

12/10: Secretary of Interior signs ROD; Tonopah Field Office issues Right-of-Way Lease/Grant

09/11: DOE finalizes \$737 million 1705 Loan Guarantee

- A withdrawal
 - withdraws land from the operation of the public land laws
 - reserves public land for the military for military purposes
- Authorities
 - Engle Act: withdrawals greater than 5,000 acres
 - Military Lands Withdrawal Act of 1986
 - Army: Forts Wainwright (AK), Greely (AK), and Bliss (NM)
 - Air Force: Nellis (NV) and Luke (AZ) Air Force Bases
 - Navy: Fallon Naval Air Station (NV)
 - All Federal environmental laws apply to withdrawn land
- A withdrawal (including a renewal) under the Engle Act
 - is usually valid for 25 years
 - requires an application filed with BLM. The application must
 - explain why the proposed withdrawn lands are specifically needed
 - include a NEPA document (EA or EIS) to complete the application
 - explain why a right-of-way or cooperative agreement is inadequate – i.e., why the military has to control the land
 - state whether the purposes require the use of water
 - is issued as an Act of Congress

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